

WHAT IS CLAIMED IS:

- 1 1. A method for quantifying risk of fraud associated with a
2 purchasing card transaction, the method comprising:
3 obtaining a charge-back history associated with a consumer involved
4 in the purchasing card transaction; and
5 determining a risk score based on the charge-back history.
- 1 2. The method of claim 1 wherein the step of obtaining a charge-
2 back history includes obtaining a reason code for each charge-back included in the
3 charge-back history.
- 1 3. The method of claim 2 further comprising weighting each
2 charge-back included in the charge-back history based on the corresponding reason
3 code.
- 1 4. The method of claim 1 further comprising determining how
2 each charge-back included in the charge-back history is associated with the
3 purchasing card transaction, and weighting each charge-back based on the
4 corresponding association with the purchasing card transaction.
- 1 5. The method of claim 1 further comprising obtaining additional
2 charge-back history associated with a machine identification number of a machine
3 involved in the purchasing card transaction, and wherein the step of determining a
4 risk score includes determining the risk score based on the additional charge-back
5 history.
- 1 6. The method of claim 1 wherein the step of determining a risk
2 score includes comparing the charge-back history to predetermined ranges of
3 charge-backs.
- 1 7. The method of claim 1 wherein the step of determining a risk
score is performed using a linear risk model.

1 8. The method of claim 1 wherein the step of determining a risk
2 score is performed using a regression risk model.

1 9. The method of claim 1 wherein the step of determining a risk
2 score is performed using a decision tree risk model.

1 10. The method of claim 1 wherein the step of determining a risk
2 score is performed using a neural network risk model.

1 11. The method of claim 1 wherein the step of determining a risk
2 score includes determining the risk score based on a plurality of purchasing card
3 transaction characteristics.

1 12. A method for quantifying risk of fraud associated with a
2 purchasing card transaction, the method comprising:
3 obtaining a charge-back history associated with a consumer involved
4 in the purchasing card transaction, wherein the charge-back history includes charge-
5 backs associated with a particular purchasing card account of the consumer, and a
6 reason code for each charge-back;
7 weighting each charge-back based on the corresponding reason code;
8 and
9 determining a risk score based on the weighted charge-backs.

1 13. A system for quantifying risk of fraud associated with a
2 purchasing card transaction, the system comprising:
3 an authorization source for obtaining a charge-back history associated with
4 a consumer involved in the purchasing card transaction, the authorization source
5 including a risk model for determining a risk score based on the charge-back
 history.

1 14. The system of claim 13 wherein the authorization source
2 includes a database for storing a reason code for each charge-back included in the
3 charge-back history, and a processor in communication with the database and

4 including the risk model, wherein the risk model includes instructions for
5 determining the risk score based on the reason codes.

1 15. The system of claim 14 wherein the risk model includes
2 instructions for weighting each charge-back included in the charge-back history
3 based on the corresponding reason code.

1 16. The system of claim 13 wherein the risk model includes
2 instructions for determining how each charge-back included in the charge-back
3 history is associated with the purchasing card transaction, and instructions for
4 weighting each charge-back based on the corresponding association with the
5 purchasing card transaction.

1 17. The system of claim 13 wherein the risk model includes
2 instructions for comparing the charge-back history to predetermined ranges of
3 charge-backs in order to determine the risk score.

1 18. The system of claim 13 wherein the risk model comprises a
2 linear risk model.

1 19. The system of claim 13 wherein the risk model comprises a
2 regression risk model.

1 20. The system of claim 13 wherein the risk model comprises a
2 decision tree risk model.

1 21. The system of claim 13 wherein the risk model comprises a
2 neural network risk model.

1 22. A computer system for quantifying risk of fraud associated
2 with a purchasing card transaction, the computer system comprising:
3 a database for storing a charge-back history associated with a
4 consumer involved in the purchasing card transaction; and

Year	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100
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